03060101-010

(Keowee River/Lake Jocassee)

General Description

Watershed 03060101-010 is located in Oconee and Pickens Counties and consists primarily of the ***Keowee River*** and its tributaries, flowing through and forming ***Lake Jocassee***. The watershed occupies 31,823 acres of the Blue Ridge region of South Carolina. The predominant soil types consist of an association of the Ashe-Saluda series. The erodibility of the soil (K) averages 0.23, and the slope of the terrain averages 45%, with a range of 10-65%. Land use/land cover in the watershed includes: 74.1% forested land, 23.9% water, 0.8% forested wetland, 0.7% barren land, 0.5% agricultural land, and 0.1% nonforested wetland.

The Keowee River is formed by the confluence of the Whitewater River and the Toxaway River, both originating in North Carolina. The Whitewater River flows across the North Carolina/South Carolina Stateline and accepts drainage from the Thompson River (Coley Creek, Wright Creek) and Devils Fork. Corbin Creek and Howard Creek (Bad Creek, Bad Creek Reservoir, Limber Pole Creek) join to form Devils Fork, which accepts drainage from another Bad Creek before joining the Whitewater River within Lake Jocassee. The Toxaway River flows across the Stateline and accepts drainage from the Horsepasture River (Mill Creek), Laurel Fork Creek (Long Branch, Bad Creek, Jackies Branch), and Devils Hole Creek before joining the Whitewater River to form the Keowee River. In the northeastern portion of the watershed, Rock Creek flows out of and back into North Carolina.

Lake Jocassee is classified TGPT, along with Coley Creek, Mill Creek, and a Bad Creek. Jackies Branch, Rock Creek, and Limber Pole Creek are classified TN. Laurel Fork Creek and its tributaries are classified TN from its origin to Lake Jocassee, and Thompson Creek is classified TN from the Stateline to Lake Jocassee. Wright Creek is classified ORW from its origin to Lake Jocassee, and the Whitewater River is classified ORW from the Stateline to Lake Jocassee. Howard Creek is classified ORW from its origin to Bad Creek, and from Bad Creek to Devils Fork it is classified TN. Corbin Creek is classified ORW from its origin to its confluence with Howard Creek. Devils Fork is classified TN from its origin to Lake Jocassee. Bad Creek Reservoir is classified FW. There are a total of 36.7 stream miles and 7,643.8 acres of lake waters in this watershed. The majority of the watershed resides within the Sumter National Forest.

Surface Water Quality

Station #	Type	Class	Description
SV-335	P	TPGT	L. Jocassee at Toxaway R., Horse Pasture R. & Laurel FK CK Confl.
SV-334	P	TPGT	Lake Jocassee, main body
SV-337	P	TPGT	Lake Jocassee outside Coffer dam at Bad Creek Project
SV-336	P	TPGT	Lake Jocassee at Thompson River & Whitewater River Confluence..

Lake Jocassee – There are four monitoring sites along Lake Jocassee. Recreational uses are fully supported **at all sites,** and significant decreasing trends in fecal coliform bacteria concentration suggest improving conditions for this parameter for the lake.

Aquatic life uses are fully supported at the furthest uplake site ***(SV-335)***; however, there is a significant decreasing trend in dissolved oxygen concentration and significant increasing trends in pH and total phosphorus concentration. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Aquatic life uses are also fully supported further downlake ***(SV-334)***; however, there are significant increasing trends in pH and total phosphorus. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, and total nitrogen concentration suggest improving conditions for these parameters.

Aquatic life uses are fully supported at site ***SV-337***, and significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. There is a significant increasing trend in pH. Aquatic life uses are also fully supported at ***SV-336***; however, there is a significant decreasing trend in dissolved oxygen concentration and significant increasing trends in pH and total phosphorus concentration. Significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters.

A fish consumption advisory has been issued by the Department for mercury and includes Lake Jocassee within this watershed (see advisory p. 37).

Natural Swimming Areas

FACILITY NAME	***PERMIT #***
RECEIVING STREAM	***STATUS***
DEVILS FORK STATE PARK	37-N13
LAKE JOCASSEE	ACTIVE

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
DUKE POWER-BAD CREEK	373303-1602 (IWP-193)
INDUSTRIAL	---------

Growth Potential

Residential growth in and adjacent to the mountain region is predicted at relatively high levels, despite the low population base. The Nantahala National Forest extends across the top of the watershed, and the Sumter National Forest extends across the majority of the remaining watershed and would tend to limit growth in those areas.